

BALASHOV, Konstantin Konstantinovich, kand. tekhn. nauk, dotsent; RYLO, Gleb Vasil'yevich, aspirant

Electromagnetic process in transformers and autotransformers.

Izv. vys. ucheb. zav.; elektromekh. 7 no. 4: 395-404 '64

(MIRA 17:7)

1. Kafedra elektricheskikh mashin Odesskogo politekhnicheskogo inatituta.

BALASHOV, K.K., kand. tekhn. nauk

Concerning the article "Potentials in the improvement transformers and increase of their power ratings". Elektrotehnika 36 no.7:58-62 J1 '65.
(MIRA 18:7)

BALASHOV, K. N.

(DECEASED)

1943/2

c' 1961

HYDROLOGY

see ILC

VASIL'YEVA, N.V., BALASHOV, K.V.

Prolongation of a reversible exclusion of the heart from circulation in moderate hypothermia. Trudy LPMI 31 no.2:118-122 '63.

(MIRA 17:10)

1. Iz kafedry gosptal'noy khirurgii Leningradskogo pediatricheskogo meditsinskogo instituta.

BAJASHOV, L.A.

Gap series. Izv. AN SSSR. Ser. nat. 29 no. 31:631-644 '65.
(MIRA 18:6)

S/064/60/000/004/016/021/XX
B013/B063

AUTHORS: Kachalov, A. I., Candidate of Chemical Sciences, Bykova,
I. G., Balashov, L. N., Chashchin, V. I.

TITLE: Industrial Production of Sodium Chlorite

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 4, pp. 72-75

TEXT: The authors have worked out and tested a scheme for the continuous production of chlorine dioxide and sodium chlorite from sodium chlorate. Methanol and hydrogen peroxide are used for reduction in the first and second stage, respectively. Chlorine dioxide is obtained in three successively operating steel vessels (7), lined with diabase and having an attachment of Raschig rings. A mixture of a sodiumchlorate solution and 25-35% methanol is gradually heated as it passes through the reaction vessels (from 60 to 80°C). The residue from the last vessel is discharged. The resulting chlorine dioxide is diluted with air until an explosion-proof concentration is reached (not more than 10%). The diluted chlorine dioxide is then passed into a cascade of three absorbers of the bubbling

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Industrial Production of Sodium Chlorite

S/064/60/000/004/016/021/XX
B013/B063

type (8). 30% hydrogen peroxide is passed into all three absorbers, and an alkaline solution with a concentration of 160 g/l is poured into the last absorber. Temperature is maintained at 0-2°C. Sodium-chlorite solutions with a content of 140-160 g/l NaClO₂, 15-20 g/l NaCl, 30-40 g/l Na₂CO₃, and 0.5-1.0 g/l H₂O₂ are obtained after absorption. Sodium chlorite is evaporated in vacuo between 70 and 80°C. Subsequently, the sodium-chlorite solution (concentration: 350-400 g/l) is passed through a crystallizer (14) with a temperature of -5 to -10°C and then filtered by a suction filter. The initial solution may be used again, while the sodium chlorite may be put at the consumer's disposal. Only an absolutely dry product can be stored in sealed containers for several years. Sodium chlorite can be dried either in a vacuum drying apparatus at 70-80°C or with the use of dry air in a boiling layer at room temperature. The last-mentioned method appears to be more promising. Dried commercial sodium chlorite contains 80-85% NaClO₂, 10-12% NaCl, and 5-8% Na₂CO₃. The method suggested is undangerous and very convenient, provided the production process is carefully checked and technical specifications are strictly observed. The concentration of chlorine dioxide in the reaction gas was measured with an automatic photo-

Card 2/4

Industrial Production of Sodium Chlorite

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B013/B063

colorimeter provided with $\Phi KC-M$ (FKS-M) photoresistors. The process is automatically checked and controlled by measuring the redox potential with a couple of platinum (iridium)-calomel electrodes. The potentials were recorded by an ЭПД (EPD) potentiometer. The formation of sodium chlorite may be determined from the redox potential. The method of potentiometric checking is recommended for use in the automation of industrial plants producing sodium chlorite. An automatic photocolormeter is recommended for the determination of the concentration of chlorine dioxide. There are 3 figures, 1 table, and 8 non-Soviet references.

Legend to Fig. 1: 1, 2, 3, 9, 10: Measuring vessels; 4: rotameter; 5: pumps; 6: heat exchanger; 7: reaction vessels; 8: absorbers; 11: PMK-2 (RMK-2) vacuum pump; 12: alkali collector; 13: vacuum evaporator; 14: crystallizer; 15: suction filter.

Card 3/4

BALASHOV, L.S.

Balashov, L. S. "Regarding A. Lane's article 'The evolution of the hydrosphere'", (American Journal of Science, 1945, Vol. 245-A), Trudy Laboratorii gidrogeol. problem im. akad. Savarenno, Vol. II, 1949, p. 230-34.

SO: U-3042, 11 March 53, (Letopis 'nukh Statey, No. 9, 1949)

Balakshov, L.S.

DANA, James Dwight; DANA, Edward Salisbury; MIKHAYEV, V.I., [translator];
POPOV, O.M., [translator]; NEMILOVA, A.V., [translator]; FRANK-
KAMENETSKII, V.A., [translator]; GRIGOR'YEV, D.P., redaktor;
BALASHOV, L.S., redaktor; NIKIFOROVA, A.N., tekhnicheskii redaktor.

[The system of mineralogy. Translated from the English] Sistema
mineralogii. Perevod s angliiskogo V.I.Mikhseva i dr. Pod.red.
D.P.Grigor'eva. Moskva, Izd-vo inostrannoi lit-ry. Vol.1 [second
half. Oxides and hydroxyls] 2-i polutom. Okisly i gidrookisly.
1951. 419 p. (MIRA 8:5)

(Mineralogy)

БАЛАШОВ, М.Н.

DANA, James Dwight; DANA, Edward Salisbury; BALASHOVA, M.N., [translator];
GRIGOR'YEVA, M.P., [translator]; MIKHAYEV, V.I., [translator];
SHAFRANOVSKIY, I.I., [translator]; GRIGOR'YEV, D.P., redaktor;
BALASHOV, L.S., redaktor; IL'YIN, takhnicheskii redaktor.

[The system of mineralogy. Translated from the English] Sistema mi-
neralogii. Perevod s angliiskogo M.N.Balashovoi, i dr. Moskva,
Izd-vo inostrannoi lit-ry. Vol.1. [first half. Elements, sulfides,
sulfosalts] 1-i polutom. Elementy, sul'fidy, sulfosoli. 1951 607 p.
(Mineralogy) (MIRA 8:5)

BALASHOV, L. S.

"Meeting for Coordination of Activity in the Field of Hydrogeology and Geological Engineering," Vest. AN SSSR, 22, No.7, 1952

BALASHOV, L.S.

Aleksandr Timefeevich Ivanov; obituary. Trudy Lab.gidrogeol.probl.
12:253-255 '55. (MLRA 9:6)
(Ivanov, Aleksandr Timefeevich, 1914-1955)

BALASHOV, L. S.

Genetic classes of chlorine waters in sediments and the distribution of trace elements in them. *Biul.MOIP.Otd.geol.*

35 no.1:124-125 Ja-F '60.

(MIRA 13:7)

(Sediments(Geology)) (Water, Underground)

(Trace elements)

BALASHOV, L.S.

Two genetic classes of saline waters in sedimentary rocks.
Trudy Lab. gidrogeol.probl,30:3-20 '60. (MIRA 14:4)
(Saline waters) (Rocks, Sedimentary)

BALASHOV, Leonid Sergeyevich; KAMENSKIY, G.M. [deceased], otv.red.;
SHMYNNAN, V.S., red.isd-va; KAEPOV, V.P., tekhn.red.

[Surkhandar'ya artesian basin] Surkhan-Dar'inskii
artezianskii bassein. Moskva, Isd-vo. Akad. nauk SSSR,
1960. 277 p. (Akademiia nauk SSSR. Laboratoriia gidrogeolo-
gicheskikh problem. Trudy, vol.25). (MIRA 13:7)
(Surkhandar'ya Valley--Water, Underground)

BALASHOV, L.S.

Flood land meadows in the middle Snov Valley. Ukr. bot. zhur.
18 no.3:64-72 '61. (MIRA 14:12)

1. Institut botaniki AN USSR, otdel geobotaniki.
(Snov Valley—Pastures and meadows)

BALASHOV, I.S.

Role of the mixing of underground waters in the formation of
their chemical composition. Trudy Lab. gidrogeol. probl. 36:95-109
'61. (MIRA 14:11)

(Water, Underground--Composition)

BALASHOV, L.S.; TOLSTOY, M.P.

Genesis and formation of underground waters in G.M.Kamenskii's
works. Trudy Lab.gidrogeol.probl. 40:51-63 '62. (MIRA 15:11)
(Water, Underground)

BALASHOV, L.S.

Vegetation of mesotrophic bogs in the Snov Valley. Ukr.bot.zhur.
19 no.1:94-99 '62. (MIRA 15:4)

1. Institut botaniki AN USSR, otdel geobotaniki.
(Snow Valley--Plant communities)

BALASHOV, L.S., kand. geol.-miner. nauk, otv. red.; FILIPPOVA,
B.S., red. isd-va; GOLUB', S.P., tekhn. red.

[Geochemistry of underground waters in certain regions of
Turkmenia and Uzbekistan] Geokhimiia podzemnykh vod neko-
torykh raionov Turkmenii i Uzbekistana. Moskva, Isd-va
Akad. nauk SSSR, 1963. 96 p. (MIRA 16:4)

1. Akademiya nauk SSSR. Laboratoriya gidrogeologicheskikh
problem.

(Turkmenistan--Water, Underground--Analysis)
(Uzbekistan--Water, Underground--Analysis)

BOGOMOLOV, G.V., akademik, otv. red.; BALASHOV, L.S., kand. geol.-
min. nauk, otv. red.; FILIPPOVA, B.S., red. Izd-va;
NOVICHKOVA, N.D., tekhn. red.

[Materials on hydrochemistry] Gidrogeokhimicheskie materialy.
Moskva, Izd-vo Akad. nauk SSSR, 1963. 128 p. (MIRA 16:5)

1. Akademiya nauk SSSR. Laboratoriya gidrogeologicheskikh
problem. 2. Akademiya nauk Belorusskoy SSR (for Bogomolov).
(Geochemistry)

ZATENATSKAYA, Nadezhda Pavlovna; BALASHOV, L.S., kand. geol.-
miner. nauk, otv. red.; FILIPPOVA, B.S., red. izd-va;
GUS'KOVA, O.M., tekhn. red.

[Interstitial waters of clay rocks and their role in the
formation of underground waters] Porovye vody glinistyykh
porod i ikh rol' v formirovani podzemnykh vod. Moskva,
Izd-vo Akad.nauk SSSR, 1963. 142 p. (MIRA 16:7)
(Tobol Valley--Water, Underground)
(Ishim Valley--Water, Underground)

BOGOMOLOV, G.V., akademik, otv. red.; BALASHOV, L.S., kand. geol-
min. nauk, otv. red.; FILIPPOVA, B.S., red.izd-va}
YEGOROVA, N.F., tekhn. red.

[Geochemistry of underground waters in some regions of the
European part of the U.S.S.R.] Geokhimiia podzemnykh vod me-
kotorykh raionov Evropeiskoi chasti SSSR. Moskva, 1963. 117 p.
(MIRA 16:8)

1. Akademiya nauk SSSR. Laboratoriya gidrogeologicheskikh
problem. 2. AN Bel.SSR (for Bogomolov).
(Water, Underground--Analysis)

BALASHOV, L.S., kand. geol.-mineral. nauk; GARMANOV, I.V., doktor geol.-
mineral. nauk

State of and trends in the development of theoretical problems
in hydrogeology. Vest. AN SSSR 35 no.9:32-39 '65.
(MIRA 18:9)

BALASHOV, L.V.

Abbreviated calculations of heat losses from buildings. Vod.
i san. tekhn. no.3:26-29 Mr '61. (MIRA 14:7)
(Dwellings—Heating and ventilation)

GUDKOV, A.A.; YEVTEYEV, I.K.; BALASHOV, L.V.

Apparatus for high-temperature fatigue testing of a rotating
speciment under cantilever bending. Zav. lab. 30 no.5:606-
607 '64. (MIRA 17:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii imeni I.P. Bardina.

BALASHOV, L.Ye.

YELISTRATOV, V.P.; BALASHOV, L.Ye.; LANIN, V.D. (Shcherbakovskaya ul. d. 44-a, Moskva).

What we demand from architects and builders. Gor. khoz. Mosk. 32
no.2:8-9 7 '58. (MIRA 11:1)

1. Chleny obshchestvennoy komissii sodeystviya pri domoupravlenii.
(Moscow--Apartment houses)

BALASHOV, M.

Importance of the key workers is increasing. Prom.koop. 13 no.6:36
Je '59. (MIRA 12:9)

1. Zamestital' predsedatelya prezidiuma Vsesoyuznogo soveta
obshchestva "Spartak".
(Physical education and training)

BALASHOV, M.

Twenty-fifth anniversary of the order-bearing "Spartak." Prom.koop.
14 no.4:32-33 Ap '60. (MIRA 13:6)

1. Zamestitel' predsedatelya prezidiuma Vsesoyuznogo soveta
obshchestva "Spartak."
(Sports)

BALASHOV, M.

Semiautomatic key. Radio no.9:39-42 S '60.
(Radiotelegraph)

(MIRA 13:10)

BALASHOV, M.

Automatic training key. Radio no.4:39-41 Ap '61. (MIRA 14:7) .
(Radiotelegraph—Equipment and supplies)

BALASHOV, M.

Tone manipulator. Radio no.2:35-36, 40 f '62. (MIRA 15:1)
(Radiotelegraph--Equipment and supplies)

BALASHOV, M.; MEROB'YAN, I.

Class II radio receiver with factory made components. V pom.
radioliub. no.12:3-14 '62. (MIRA 16:10)

BALASHOV, M.

Transistor audio generator. V pom. radioliub. no.14:8-18 '63.
(MIRA 16:11)

USSR/ Metallurgy - Metal treatment

Card 1/1 Pub. 128 - 13/25

Authors : Getsov, L. B., Engineer, and Balashov, M. A.

Title : Nitriding of large size parts

Periodical : Vest. mash. 35/4, 55-57, Apr 1955

Abstract : The experiments (lasting several years) carried out by the Metallurgical Inst. im. Sverdlov on the nitriding of large parts (shafts 4 - 5 m long, of boring machines are described. The causes for the three major defects (low surface hardness, reduced depth of nitriding and brittleness of the nitrided layer) encountered during the nitriding process, are explained. The process of nitriding machine shafts and shafts is described. Details, tables, graphs, drawings.

Institution :

Submitted :

SOV/14358-9-3/18

AUTHOR: Kolosov, S.P., Candidate of Technical Sciences, Docent;
Balashov, M.A., Engineer

TITLE: Problems of Analytical Computation of Electrical
Circuits with Semi-Conducting Thermo-Resistances
(Voprosy analiticheskogo rascheta elektricheskikh
skhem s poluprovodnikovymi termosoprotivleniyami)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Energetika,
1958, Nr 9, pp 24-31 (USSR)

ABSTRACT: Computing electric grids with semi-conducting thermo-
resistances (thermistor) has its own specific prob-
lems, some of which are dealt with in this paper.
First the causes are given for the non-linearity of
the static volt ampere characteristic of thermistors
and the temperature resistance curve then discussed.
As the thermistor's resistance depends very much on
the temperature as well as on the current value, the
volt-ampere characteristic is markedly non-linear and
can have a section with a negative slope. The exist-
ence of a falling section in this curve leads to

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SOV/14358-9-3/18

Problems of Analytical Computation of Electrical Circuits with
Semi-Conducting Thermo-Resistances

multivalence of the volt-ampere characteristic, which not only enables us to use the thermistor in proportional working, but to create a relay effect in thermistor circuits. A thermistor, then, is a sharply expressed non-linear resistance. The paper then deals with the method for computing thermistor circuits in a non-specific case. This is a graphic method. Its efficiency and simplicity depend to a large degree on well selected approximation, which is itself examined here, i.e. the polynome approximation. Three cases of polynomial approximation of the temperature characteristics are examined: a) When the temperature variation range of the thermistor at work is quite narrow. b) When the temperature variation range covers a large section of the temperature characteristic. c) With average temperature variation range. The author concludes that the work of electrical circuits with thermistors can be computed without great difficulty with the help of analytical methods, using only the temperature

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SOV/143-58-9-3/18

Problems of Analytical Computation of Electrical Circuits with
Semi-Conducting Thermo-Resistances

characteristic set in an analytical form. There are
3 graphs, 1 table and 12 Soviet references.

ASSOCIATION: Moskovskiy aviatsionnyy institut imeni Sergo Ordzhon-
ikidze (Moscow Aviation Institute imeni Sergo Ordzhon-
ikidze)

SUBMITTED: May 15, 1958

Card 3/3

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. 28(1) PHASE I BOOK EXPLOITATION SOV/2309

- . Ageykin, Dmitriy Ivanovich, Mikhail Aleksandrovich Balashov, Sergey Petrovich Kolosov, Valentina Ivanovna Nefedova, Yevgeniy Mikhaylovich Reshetnikov, Nikolay Ivanovich Sokolov, Vasilii Mikhaylovich Stromilov, Nikolay Mikhaylovich Tishchenko, and Nikolay Petrovich Udalov

Rukovodstvo po proyektirovaniyu elementov i sistem avtomatiki; posobiye po kursovomu proyektirovaniyu (Handbook on the Design of Automatic Control Elements and Systems; Textbook for Term Projects in Design) No. 2. Moscow, Oborongiz, 1959. 247 p. (Series: Moscow. Aviat-sionnyy institut im. Sergo Ordzhonikidze) Errata slip inserted. 17,500 copies printed.

Ed. (Title page): B.N. Petrov, Corresponding Member, USSR Academy of Sciences, Professor; Ed. (Inside book): V.N. Istratov, Candidate of Technical Sciences; Ed. of Publishing House: E.A. Shekhtman; Tech. Ed.: V.P. Rozhin; Managing Ed.: A.S. Zaymovskaya.

PURPOSE: This is a textbook for students of the electromechanical departments of vtuzes working on term- and diploma design projects.

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Handbook on the Design (Cont.)

80V/2309

Some chapters may also be useful to engineering personnel working with automatic control systems.

COVERAGE: The authors discuss basic problems in the design of automatic-control system elements, such as transducers, relays, clutches, and power transformers. They also describe servo systems, particularly autopilots, and present numerical examples of calculating system parameters. Typical assignments for students working on term design projects are also presented. The book was written by part of the teaching staff of Moscow Aviation Institute imeni Sergo Ordzhonikidze, under the direction of Professor B.N. Petrov, Corresponding Member, USSR Academy of Sciences. Chapter I was written by D.I. Ageykin; Chapter II, by S.P. Kolosov and M. A. Balashov; Chapter III, by V.I. Nefedov; Chapter IV, by Ye. M. Reshetnikov; Chapter V, by N.P. Udalov; Chapter VI, by N.M. Tishchenko; Chapter VII, by N. I. Sokolov; and Chapter VIII, by V.M. Stromilov. The authors thank Docents V.N. Istratov, S.P. Inozemtsev and A.F. Khokhlov, Candidates of Technical Sciences, for reviewing the book. There are 69 references, all Soviet (including 2 translations).

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• Handbook on the Design (Cont.)

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1. Remarks Concerning the Term Assignment and Term Design Project

238

2. Typical Assignment for a Term Design Project

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AVAILABLE: Library of Congress

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JP/bg
9-30-59

BALASHOV, M.A.; VORONKOV, B.S.; YELAGIN, Ye.B.; KISELEV, L.N.; KOLOSOV, S.P.; LEONT'YEVA, V.P.; NEFEDOVA, V.I.; STRONILOV, V.M.; SOKOLOV, N.I.; TISHCHENKO, N.M.; UDALOV, N.P.; PETROV, B.N., akademik, red.; GRIGORASH, K.I., red. izd-va; ROZHIN, V.P., tekhn. red.

[Handbook on the design of components and systems of automatic control; a manual for the preparation of course and diploma projects] Rukovodstvo po proektirovaniu elementov i sistem avtomatiki; posobie po kursovomu i diplomnomu proektirovaniu [By] M.A.Balashov i dr. Pod red. B.N.Petrova. Moskva, Gos. nauchno-tekhn. izd-vo Oborongiz. No.4. 1961. 311 p.

(MIRA 15:3)

1. Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze. (Automatic control) (Electronics)

1. BALASHOV, M. I.
2. USSR (600)
4. Steel Castings
7. Effect of non-metallic inclusions on the mechanical properties of low-carbon steel castings, Lit. proizv., No. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

11500

24487
S/128/60/000/010/015/016/XX
A033/A133

AUTHOR: Balashov, M. I.

TITLE: Sulfur in surface layers of steel castings

PERIODICAL: Liteynoye proizvodstvo, no. 10, 1960, 36 - 38

TEXT: The author points out that one of the main causes of rejects in the production of large steel castings for railroad cars is the origination of hot cracks. The presence of a decarbonized layer at the crack surface, decreasing with depth, proves that the formation of cracks is taking place within the course of a protracted time period. Obviously, the sulfur concentration in the metal surface layers takes place as a result of its contact with the gas phase arising during the reaction process between the poured metal and the molding mixture which contains always sulfur-containing additives. The casting of specimens in ceramic molds confirmed that in this case a sulfur concentration is not taking place. Tests carried out to measure the temperature in king bolt beam castings and determine the duration of the formation of a solid metal skin on the casting surface showed that, on the average, the formation of the surface skin begins 15 seconds

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24.87

Sulfur in surface layers of steel castings

S/128/60/000/010/015/016/XX
A033/A133

after pouring has been terminated or 40 seconds after pouring started. The intensity of the sulfur oxidation depending on the temperature has been established, and it was found that the sulfur oxidation intensity depends on the warming-up rate of the mold walls. Measuring the mold wall temperature at different distances from the casting surface showed that at a distance of 25 - 35 mm the mold walls are not heated up to more than 660°C. It was found that at a distance of 20 mm the sulfur content in the molding mixture decreased by 50% compared to the initial one. Thus the main supplier of sulfur dioxide is a comparatively thin layer of the molding mixture. Fig. 4 shows the distribution of the sulfur and carbon quantities over the wall thickness. As it can be seen from the graph the highest sulfur content (0.2 - 0.4%) is found in the surface layer in a depth of 0.3 - 0.4 mm. The degree of sulfur saturation in the casting surface and the display of hot shortness is a function of the SO₂-content in the gas phase. The sulfur content in coating mixtures varies in the range of 0.13 - 0.075% which is the main reason for rejects of large-size castings because of cracks. Tests were carried out to obtain under laboratory conditions quantitative data on the saturation of the metal with sulfur contained in the coating mixture and on the formation of hot cracks. It was found that an effective means of

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24487

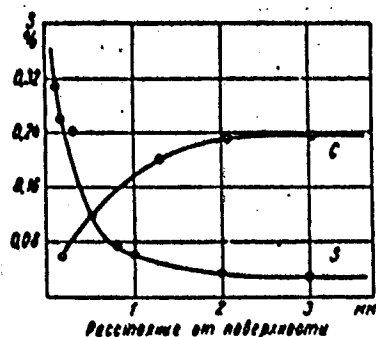
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A033/A133

Sulfur in surface layers of steel castings

preventing hot cracks is to improve the gas removal by a system of small apertures and to reduce the sulfur content of the molding mixture. There are 6 figures and 1 Soviet-bloc reference.

Fig. 4.



Card 3/3

BALASHOV, M.I.

Chain-like nonmetallic inclusions in cast steel. Lit. proizv.
no.12:3 D '61. (MIRA 14:12)
(Steel castings--Defects)

SERAFIMOV, L. A.; TIMOFEYEV, V. S.; BALASHOV, M. I.; MEZHEVICH, G. V.

Solubility in the systems isobutyraldehyde - n. butyraldehyde -
water - toluene and cyclohexanol - cyclohexanone - cyclohexene -
water, Izv. vys. ucheb. zav.; khim. i khim. tekhn. 5 no.5:722-
726 '62. (MIRA 16:1)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
Lomonosova, kafedra tekhnologii osnovnogo organicheskogo
sintesa.

(Systems(Chemistry)) (Solubility)

MATLIN, Semen L'vovich; FILIMONOV, I.M., red.; BALASHOV, M.I.,
red.; KOROLEV, A.V., tekhn. red.

[Radio diagrams] Radioskhemy. Moskva, Izd-vo DOSAAF, 1963.
46 p. (MIRA 16:7)

(Radio circuits)

BALASHOV, M.I.; BEKERMAN, F.A.; PEREVEZENTSEV, T.G.; Prinimali uchastiye:
SMIRNOVA, L.G., rabotnik; ZHIGALENKOVA, R.S., rabotnik;
DUBOVA, L.S., rabotnik

Prevention of waterleaks in iron castings. Lit. proizv. no.1:
40 Ja '65. (MIRA 18:3)

1. TSentral'naya zavodskaya laboratoriya (for Smirnova, Dubova,
Zhigalenkova).

BALASHOV, Mikhail Ivanovich; YAKOBSON, A.Kh., red.

[Radio amateur's measuring devices] Izmeritel'nye pribory
radioliubitelia. Moskva, Energiia, 1965. 31 p. (Massovaia
radiobiblioteka, no.576) (MIRA 18:8)

PALEHNOV, M.M.; LINTIN, A.E.

Design of single-screw extruders for the processing of thermoplastics. Study MIKHM 27:89-27 162.

(MIRA 18:8)

S/191/61/000/001/007/015
B101/B205

AUTHORS: Balashov, M. M., Levin, A. N.

TITLE: Flow of block polystyrene "D", and development of a rheometer

PERIODICAL: Plasticheskiye massy, no. 1, 1961, 23-30

TEXT: In the introduction to this paper, the theory of flow of non-Newtonian fluids as applied to the flow of molten polymers is discussed on the strength of R. S. Spencer's papers. The methods and apparatus used so far for determining rheological properties are said to be cumbersome and inadequate. In the new rheometer designed by the authors, the molten polymer is pressed simultaneously through two capillaries of different lengths. The flow velocity of the material is equal in both capillaries, and varies continuously in time. The rheometer is shown in Fig.1. V
Socket (1), which is heated by electric heater (2), contains two channels into which the substance to be tested is introduced. The channels are closed at the bottom by two tightly linked pistons (25), which contain the short and the long capillary (3). The material is pressed through the capillaries by upward motion of the pistons. The pistons are mounted on

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movable plate (23) which is heated by heater (24) and moved by rod (22). The material leaves the pistons through outlets (A). The two channels are closed on top by stoppers (4) which are mounted on slider (13). The latter is moved by screw (11) which passes through immobile cross beam (12). The base of (13) is heated by heater (6). The pressure in the channels is measured with strain gauges which are made up of elastic ring (9) bearing several bridge-connected wire gauges. The channel pressure is transferred to the strain gauges by piston (5) and rod (7), then converted into an electric signal and recorded by an oscilloscope. Material leaking through (4) and (5) is discharged through channel E. Rings (9) in socket (8) are fastened to terminals (10). (8) is connected by water flowing through channels which are not shown in the figure. The flow velocity of the material is proportional to the velocity of pistons (25), which is measured with a pickup consisting of armature (14) with copper winding (15). The armature moves between the poles of a magnet. The pickup has a linear characteristic and must be shielded against external magnetic fields. Velocity and pressure are recorded simultaneously by an oscilloscope. The flow curve may be obtained by one single experiment, by steadily varying the velocity of pistons (25). When the slider is lifted,

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the channels are filled with the material (cylindrical specimens or granuli) from above and are then compressed by stoppers (4) and screws (11). The channels may be filled with previously molten material also through the feeds B and P. The pistons may be moved by any steady drive. The figure shows a drive by weight (16), lever (17), toothed wheel (18), and rack (19). Pressure transfer to rod (22) is effected by cup springs (21), whose initial tension is adjusted by pin (20). Thermocouples T_1 , T_2 , and T_3 are used for temperature regulation. The rheological behavior of "A" ("D") polystyrene between 160-245°C and up to 220 atm pressure was tested with the rheometer described here. Capillaries 2.6, 2.0, and 1.6 mm in diameter were used for the purpose. The short capillary was 10 mm long, and the long one, 25 mm. Figs. 3-5 show various circuit diagrams for the wire strain gauges. In spite of considerably spread, measurements have shown a sufficiently linear course of the function $\log \Delta P = f(\log \Delta Q)$ ✓

(Q = volume velocity of flow expressed in cm^3/sec). The equation $Q/\pi R^3 = [m/(n+3)] \tau_w^n$ (14) was used for calculation. R is the radius of the capillary; m and n are coefficients; and τ is the shear stress. n is Card 3/7

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V

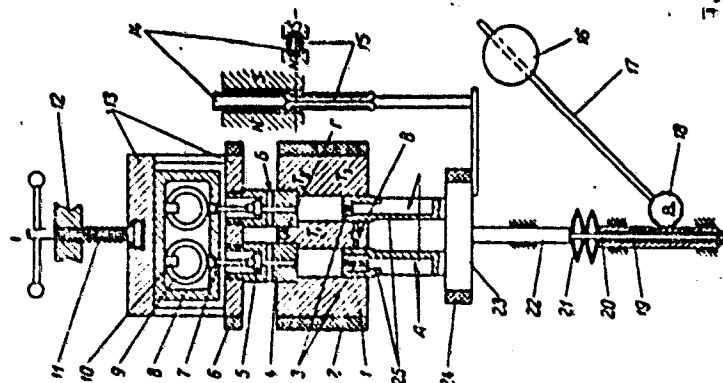
independent of temperature, and equals 3.199 for polystyrene. m is independent of temperature and obeys the equation $m = a \exp(bT)$ (23).
 $a = 9.502 \cdot 10^{-27}$; $b = 0.0472$. The pressure loss ΔP_{inp} occurring when the material enters the capillary, was calculated from the equation
 $P_{inp} = (P_0 l_1 - P_1 l_0) / (l_1 - l_0)$ (P_0 and P_1 denote the pressure in the channels with the short and the long capillary, respectively; l_1 and l_0 are the lengths of the long and short capillaries, respectively). The empirical equation $Eu_{inp} = K/Re^\alpha$ (24) was obtained for polystyrene. Eu_{inp} is Euler's number; $K = \text{const}$; $Re = \rho v^{2-1/n} R^{1/n} (n+3)^{1-1/n} m^{1/n}$ is the actual Reynolds number; ρ density; R - radius of the capillary; $v = Q/\pi R^2$ is the mean outflow velocity for round capillaries. The linear function $\log Eu_{inp} = f(\log Re)$ was obtained for $K = 147.6$, $\alpha = 1.037$. Kanavets' plastometer and papers by N. P. Shanin and R. V. Torner are mentioned. There are 12 figures, 1 table, and 15 references: 6 Soviet-bloc and 8 non-Soviet-bloc.

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Fig. 1



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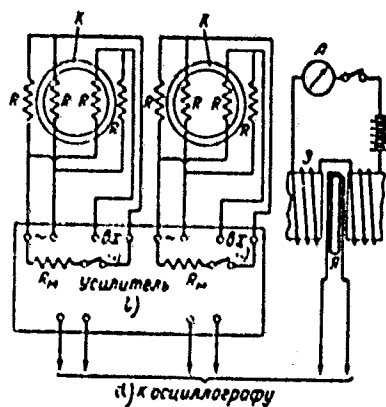


Fig. 3

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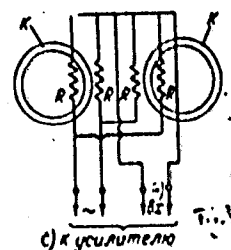


Fig. 4

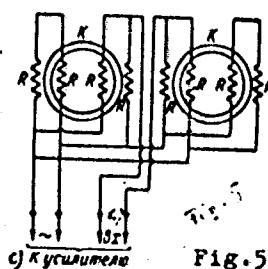


Fig. 5

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Legend to Figs. 3-5: K - ring of the strain gauge; R - wire gauges;
J - coil of the electromagnet of the pickup; Я - armature of the pickup;
R_н - scale resistor; a) input; b) amplifier; c) to amplifier; d) to
oscilloscope.

Card 7/7

BALASHOV, M.M. inzh.; LEVIN, A.N., doktor tekhn.nauk, prof.

Solving some problems of the flow of fused polymers in
screw presses. Khim. mash. no.6:29-33 N-D '61.

(MIRA 15:2)

(Polymers)
(Power presses)

BALASHOV, M.M.; SHISHOVA, M.Z.

Food poisoning caused by boiled eggs. Vop. pit. 24 no. 677
N-D 165 (MIRA 1971)

1. Kafedra gigiyeny pitaniya (zav. -- prof. M.P. Bolotov) i
pishchevoy otdel gorodskoy sanitarno-epidemiologicheskoy
stantsii, Irkutsk.

BALASHOV, M.P.

New technological system for the internal dyeing of capronium
staple fiber. Khim.volok. no.1:70-71 '61. (MIRA 14:2)

1. Zavod iskusstvennogo volokna, g.Shuya.
(Dyes and dyeing-- rayon)

BALASHOV, M.T., kand.sel'skokhoz.nauk; PALAMARENKO, I.K., kand.sel'skokhoz.
nauk; SAVCHENKO, P.Yu., kand.biolog.nauk; LUZHKOV, M.O., nauchnyy sotrudnik

Comparative studies on some biological characteristics of hybrid
swine. Nauk.pratsi "Ask.-Nov." 9:3-9 '61. (MIRA 15:3)
(Swine breeding)

LEYSHMAN, M.B.; BALASHOV, M.Ye.; AFANAS'YEV, A.S.; MIKHELEV, V.M.;
TAKHVANOV, G.I.; SHKHALAKHOV, Yu.Sh.; SANNIKOV, Yu.I.; SLAVIN, A.A.;
BEYRAKH, Z.Ya.; KAPLINSKIY, B.I.; ORLOV, O.A.; PEVZNER, V.V.;
VALOV, O.V.; KIREYEV, V.V.

Inventions. Avtom. i prib. no.3:76-77 J1-S '64.

(MIRA 18:3)

BALASHOV, N.D., insh.

Fields of use for powered "Mosbass" supports in Moscow Basin
mines. Izv.vys.ucheb.sav.; gor.shur. no.1:7-13 '60.
(MIRA 13:6)

1. Institut gornogo dela Akademii nauk SSSR. Rekomendovana
kafedroy gornogo dela.
(Moscow Basin--Mine timbering)

BALASHOV, N.D., inzh.

Determining the area of use of the "Mosbass" shield in mines of
the Moscow Basin. Trudy Inst. gor. dela 5:45-49 '60.

(MIRA 14:5)

(Moscow Basin—Coal mines and mining—Equipment and supplies)

BALASHOV, N.D., inzh.

Determining the area of use of "Mosbass" shield supports
in Moscow Basin mines. Nauch.sob.Inst.gor.dela 5:45-49
'60. (MIRA 15:1)

(Moscow Basin—Mine timbering)

BELYAYEV, V. S., kand. tekhn. nauk; FEOKTISTOV, G. P., inzh.;
BALASHOV, N. D., inzh.

Selection of methods of mechanization in mining thick seams in
mines of the Noril'sk coal deposit. Mekh. i avtom. v gornoi
prom. no. 2:42-59 '62.
(MIRA 16:17)

(Noril'sk region--Coal mines and mining--Equipment
and supplies)

BALASHOV, N. D., inzh.

Concentrating and speeding up coal mining by using front-action
units. Mekh. i avtom. v gornoi prom. no. 2:59-69 162.
(MIRA 1611)

(Coal mining machinery)

BALASHOV, N.D., kand.tekhn.nauk

Technology of auger mining stages. Mekh. i avtom. v gor. prom.
no.3:3-16 '63. (MIRA 16:10)

L 24410-66

ACC NR: AP6006376

SOURCE CODE: UR/0413/66/000/002/0109/0109

AUTHOR: Balashov, M. Ye.

ORG: none

26
3

TITLE: Device for dynamic calibration of pressure transducers. Class 42, No. 178151 [announced by All Union Scientific Research Institute of Metrology im. D. I. Mendeleev (Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 109

TOPIC TAGS: pressure transducer, pressure measurement *am*

ABSTRACT: This Author Certificate presents a device for dynamic calibration of pressure transducers. The device contains a working cylinder filled with a liquid transmitting pressure to a sensing element, and an incompressible piston connected to vibration equipment (see Fig. 1). To increase the accuracy of determining the absolute values of reproducible pressures, the free piston of a load-bearing piston manometer is inserted in the working cylinder.

Cord 1/2

UDK: 531.787.3

L 24410-66

ACC NR: AP6006376

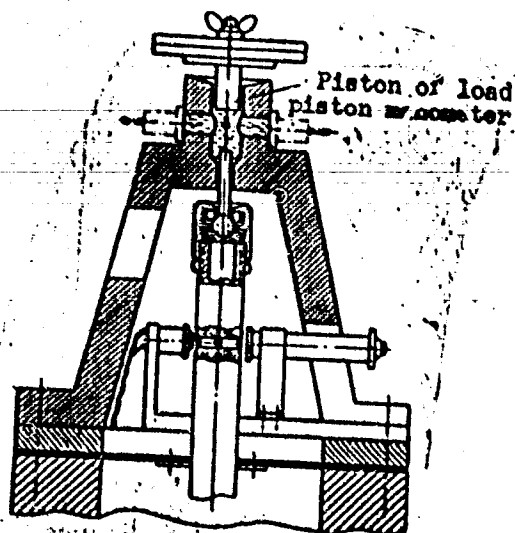


Fig. 1.

Orig. art. has: 1 diagram.

SUB CODE: 11909, 2/SUBH DATE: 28 May 64

Cord 2/2 dda

BALASHOV, N.G., podpolkovnik meditsinskoy sluzhby; KLIMOV, G.I.,
kapitan meditsinskoy sluzhby

Cases of injury caused by nitric oxide. Voen.-med. zhur.
no.2:77-78 '65.
(MIRA 18:11)

BALASHOV, N.G., kand. biol. nauk

Veterinary hygienic evaluation of sperm. Veterinariia 42
no.8:86-88 Ag '65. (MIRA 18:11)

1. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh
preparatov.

BALASHOV, N.G., podpolkovnik meditsinskoy sluzhby

Diagnosis of valvular pneumothorax. Voen.-med.shur. no.7:34-35
Jl '57. (MIRA 11:1)

(PNEUMOTHORAX, diag.
valvular pneumothorax)

PALASHOV, N. O. Cand Bio Sci -- (diss) "Concerning the question on the Structure and Functional Condition of the Testes in Horses (*E. caballus*) in Ontogenesis," Moscow, 1960, 20 pp, 200 copies (Institute of Morphology of Animals in A. N. Severtsov, AS USSR) (KL, 48/60, 113)

BALASHOV, N.N.

36773. Otkhbor i khraneniye semennogo kartofelya. Sots. sel. khoz-vo V^o zebekistana, 1949, No. 4, o. 70-75.

SO: Letopis' Zhurnal'Nykh Statey, Vol. 50, Moskva, 1949

UVAROV, I.P.; PARSHUTKIN, Yu.A.; BALASHOV, N.N.; BOGDANOV, G.A.; BEZMOZGIN, E.S.;
NEMCHENKO, A.G.; YUDKEVICH, Yu.D.; KIPRIANOV, A.I.

Vapor-phase pyrolysis of wood-tar oils. Gidroliz. i lesokhim.
prom. 14, nb.8:5-6 '61.
(MIRA 16:11)

1. Tsentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut
(for Uvarov, Parshutkin, Balashov, Bogdanov). 2. Vsesoyuznyy
nauchno-issledovatel'skiy institut po pererabotke i ispol'-
zovaniyu topliva (for Bezmozgin, Nemchenko, Yudkevich).
3. Leningradskaya lesotekhnicheskaya akademiya im. S.M. Kirova
(for Kiprianov).

LISIYENKO, G.P.; BALASHOV, N.P.

Practices in the payment of wages for finishing work. Transp.
stroil. 15 no.4:33-34 Ap '65. (MIRA 18:6)

1. Upravlyayushchiy trestom Sverdlovsktransstroy (for Lisiyenko).
2. Nachal'nik otдела труда i zarabotnoy platy tresta Sverdlovsk-transstroy (for Balashov).

COUNTRY : USSR.
 CATEGORY : Farm Animals.
 ABS. JOUR. : The Swine. Q
 : RZhBiol., No. 3, 1959, No. 12061
 AUTHOR : Balashov, N. T.; Palamarenko, I. K.
 INST. : Askaniya-Nova Ukrainian Scientific Research*
 TITLE : The Interspecies Crossing of Pigs.
 ORIG. PUB. : Tr. Ukrainsk. n.-i. in-ta zhivotnovodstva,
 "Askaniya-Nova", 1957, 6, 98-104
 ABSTRACT : An experiment on fattening which was carried
 out on a small number of heads at the Cher-
 vonyy sovkhos in Zaporozhskaya oblast' showed
 that hybrids which were obtained by crossing
 sows of the Ukrainian Steppe white breed with
 boars of the Mirgorodskaya breed surpassed
 purebred animals when fattening was discon-
 tinued by 11.3 percent to live weight, by
 4.5 percent in lard yield of carcasses, while
 by comparison to hybrids of the Ukrainian
 Steppe white breed and the large white breed

Card:

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*Institute of Animal Husbandry.

COUNTRY : USSR
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : they were correspondingly superior by 2.8 and 3.4 percent. The feed's expenditure per 1 kg of live weight gain was smaller in hybrid than in purebred animals. It is recommended to institute industrial crossing of the Ukrainian Steppe white breed not only with pigs of the Birkshire, Mirgorodskaya and Mangalitskaya breeds but also with the Ukrainian Steppe speckled pigs.

CARD: 2/2

GREBEN', L.K., akademik; BAYDUGANOVA, Ye.P., nauchnyy sotr.; SAVCHENKO, P.Ye., kand. biol. nauk; GREBEN', Ye.K., kand. sel'khoz. nauk; KRYLOVA, L.F., nauchn. sotr.; SIDOROVA, L.M., nauchn. sotr.; SOROKINA, V.I., nauchn. sotr.; BAGMET, M.I.; LAZORENKO, Ye.L.; KHOKHLYUK, A.G.; PASHKEVICH, M.K.; BRYZHNIK, K.A.; LUZHKOVA, M.A., kand. sel'khoz. nauk; BALASHOV, N.T., kand. sel'khoz. nauk; ZHELIKHOVSKIY, V.I., redaktor; POTOTSKAYA, L.A., tekhn. red.

[Ukrainian White Steppe swine] Ukrainskaia stepnaia belaia poroda svinel. Pod obshchei red. L.K.Grebenia. Kiev, Gos-sel'khozizdat USSR, 1962. 252 p. (MIRA 16:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut zhivotnovodstva stepnykh rayonov im. M.F.Ivanova "Askaniya-Nova."
 2. AN Ukr.SSR i Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for L.K.Greben').
 3. Ukrainskiy nauchno-issledovatel'skiy institut zhivotnovodstva stepnykh rayonov im. M.F.Ivanova "Askaniya-Nova" (for Bayduganova).
 4. Melitopol'skaya gosudarstvennaya plemennaya stantsiya (for Bagmet, Lazorenko, Khokhlyuk).
 5. Spetsialist sovkhoza "Komsomolets", Stavropol'skiy kray (for Bryzhnik).
- (Ukraine--Swine breeding)

TOKAREV, Lev Nikolayevich; BALASHOV, G.I., red.; FREGER, D.P.,
red. izd-va; BELOGUROVA, I.A., tekhn. red.

[High-speed full-wave magnetic amplifier without control
windings] Bystrodeistvuiushchii dvukhpolutperiodnyi mag-
nitnyi usilitel' bez obmotok upravleniia. Leningrad,
1962. 22 p. (Leningradskii dom nauchno-tekhnicheskoi pro-
pagandy. Obmen peredovym opytom. Seria: Pribory i elementy
avtomatiki, no.17) (MIRA 16:5)

(Magnetic amplifiers)

BALASHOV, P.I.

Daily diagram is in function. Mashinostroitel' no. 1:3 Ja '66
(MIRA 19:1)

BALASHOV, P. K.

"Speedy Method for Propogating Grapevines," Sad i og., No.4, 1952

PALASHOV, P. K.

"Growing of Nuts in the Dry Steppe Zone on Plowed-Under Chestnut Soils," Les.
khoz., 5, No.4, 1952

BALASHOV, P. K., Cand Biol Sci -- (diss) Introduction of pine trees in the chestnut soils of Lower Povolzh'." Moscow, 1960. 17 pp; (Moscow Order of Lenin and Order of Labor Red Banner State Univ im M. V. Lomonosov, Biology-Soils Faculty); 120 copies; price not given; (KL, 17-60, 146)

BALASHOV, P.K.

Grape seedlings in Kamyshina District. Agrobiologiya no.4:
619-620 JI-Ag '60. (MIRA 13:8)

1. Kamyshinskiy lesomeliorativnyy opytnyy punkt Vsesoyuznogo
nauchno-issledovatel'skogo instituta agrolesomelioratsii.
(Kamyshina District--Viticulture)

BALASHOV, P.K., kand.biologicheskikh nauk

Kamyshin peach. Agrobiologiya no.1:156 Ja-F '62. (MIRA 15:3)

1. Kamyshinskiy aprolesomeliativnyy opornyy punkt Vsesoyuznogo nauchno-issledovatel'skogo instituta agrolesomeliatsii, Volgogradskaya oblast'.

(Volgograd Province--Peach--Varieties)

BALASHOV, P.S.

Improved passage ager for printed knit fabrics. Obm.tekh.opyt.
[MLP] no.36:43-44 '56. (MIRA 11:11)
(Textile printing--Equipment and supplies)

BALASHOV, P.S.; GARNOVSKAYA, G.N.; FEDILOV, Ye.Ye.

Using shale phenols as wetting agents in the mercerization
of cotton fibers. Khim. i tekhn. gor. slan. i prod. ikh perer.
no.10:242-245 '62. (MIRA 17:5)

TIMOSHENKO, V.V.; MARTYNISHKIN, A.M.; TSUKANOV, V.P.; GANGO, Ya.V.;
SHIKOV, I.P.; NIKONOV, A.V.; POSTNIKOV, V.P.; KOROLEV, G.D.;
ARTAMONOV, A.M.; TEMNIKOV, S.N.; KABLUKOVSKIY, A.F.; MAKHOV, A.Kh.;
KOTIKOV, A.Kh.; ZNAMENSKIY, B.A.; ZUYEV, T.I.; POZDNYAKOV, F.P.;
BALASHOV, S.A.; YERMONIN, I.P.

New design of electrode holders for electric-arc smelting furnaces.
Prom. energ. 15 no.8:13-14 Ag '60. (MIRA 15:1)
(Electric furnaces)

BALASHOV, S.

The Construction of Moscow State University, by S. Balashov, Chief Site Engineer
from an article entitled "Building construction in the U.S.S.R.", Civil Engineering
(London), June 1954, p. 600

Photographs: The new Moscow State University on Lenin Hills.
Work in progress on the main building.

BALASHOV, S.I., inzhener.

Overall mechanization in the experimental demonstration building
projects in Moscow. Mekh. strei. 12:3-12 D '55. (MIRA 9:2)

1. Zamestitel' nachal'nika Glavmesstroya.
(Moscow--Building)

БАННИКОВ, С.И.

BRANISHNIKOV, Pavel Ivenovich, kandidat tekhnicheskikh nauk; UDAL'TSOV,
A.N., glavnyy redaktor; BALASHOV, S.I., inzhener, redaktor

[Erecting buildings on wedge foundations] Stroitel'stvo sdanii
na klinovidnykh fundamentakh. Tema 38, no.1-56-38. Moskva, Akad.
nauk SSSR, 1956. 12 p. (MIRA 10:7)
(Foundations)